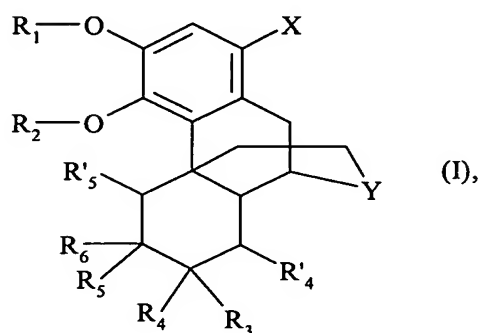




LISTING OF CLAIMS

Claims 1-30 (canceled)

31. (previously presented) A compound selected from those of formula (I) :



5 wherein

- R_1 represents alkyl,
- R_2 represents hydrogen, alkylcarbonyl, haloalkylcarbonyl or arylcarbonyl,

- Y represents >NR_7 , $\text{>N}^+\text{O}^-\text{R}_7$ or $\text{>N}^+\text{R}_7\text{R}'_7$ Z^-

wherein R_7 and R'_7 , which may be identical or different, each represent alkyl and Z^- represents a halogen anion,

- R_3 represents hydroxy or alkoxy,
- R_4 and R'_4 each represent hydrogen or together form an additional bond, or R_3 and R_4 together form oxo when X is fluorine, chlorine or iodine, or $=\text{N-OR}_8$ (wherein R_8 represents hydrogen or alkyl),
- R_6 represents hydroxy, alkylcarbonyloxy (wherein the alkyl moiety may be substituted by hydroxy, alkoxy, carboxy or alkyloxycarbonyl) or alkoxy,
- R_5 and R'_5 each represent hydrogen or together form an additional bond, or R_5 and R_6 together form oxo, $=\text{N-OR}_9$ or $=\text{N-NR}_{10}\text{R}_{11}$ (wherein R_9 , R_{10} , and R_{11} , which may be the same or different, each represent hydrogen or alkyl),

- and X represents halogen,

it being understood that:

the compound of formula (I) may not represent 1-bromo-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-one,

- 5 the term "alkyl" denotes an alkyl group having 1 to 6 carbon atoms which may be linear or branched, and
the term "alkoxy" denotes an alkyloxy group having 1 to 6 carbon atoms which may be linear or branched,

10 its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically-acceptable acid or base.

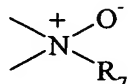
32. (previously presented) A compound of Claim 31, wherein R_1 represents methyl.

33. (previously presented) A compound of Claim 31, wherein R_2 represents hydrogen.

34. (previously presented) A compound of Claim 31, wherein R_2 represents alkylcarbonyl.

15 35. (previously presented) A compound of Claim 31, wherein R_2 represents ethylcarbonyl.

36. (previously presented) A compound of Claim 31, wherein Y represents NR_7 .

37. (previously presented) A compound of Claim 31, wherein Y represents 

20 38. (previously presented) A compound of Claim 31, wherein X represents chlorine.

39. (previously presented) A compound of Claim 31, wherein X represents bromine.

40. (previously presented) A compound of Claim 31, wherein R₃ represents alkoxy.

41. (previously presented) A compound of Claim 31, wherein R₅ represents hydrogen.

42. (previously presented) A compound of Claim 31, wherein R₆ represents OH.

43. (previously presented) A compound of Claim 31, wherein R₆ represents
5 alkylcarbonyloxy.

44. (previously presented) A compound of Claim 31, wherein R₅ and R₆ together form
oxo.

45. (previously presented) A compound of Claim 31, wherein R₅ and R₆ together form
 =N—OH

46. (previously presented) A compound of Claim 31, which is selected from (9 α ,13 α)-1-
10 chloro-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-4,6-diol and addition salts
thereof with a pharmaceutically-acceptable acid or base.

47. (previously presented) A compound of Claim 31, which is selected from (9 α ,13 α)-1-
chloro-3,7-dimethoxy-17-methyl-4-(propionyloxy)-7,8-didehydromorphinan-6-yl
propionate and addition salts thereof with a pharmaceutically-acceptable acid or base.

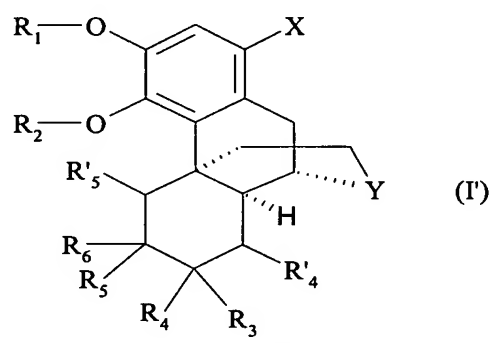
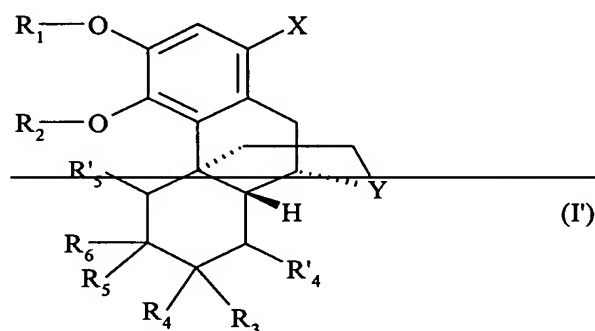
48. (previously presented) A compound of Claim 31, which is selected from (9 α ,13 α)-1-
15 bromo-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-4,6-diol and addition salts
thereof with a pharmaceutically-acceptable acid or base.

49. (previously presented) A compound of Claim 31, which is selected from (9 α ,13 α)-1-
bromo-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-one oxime
20 and addition salts thereof with a pharmaceutically-acceptable acid or base.

50. (previously presented) A compound of Claim 31, which is selected from (9 α ,13 α)-1-bromo-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-one N-oxide and addition salts thereof with a pharmaceutically-acceptable acid or base.

51. (previously presented) A compound of Claim 31, which is selected from (9 α ,13 α)-1-chloro-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-one N-oxide and addition salts thereof with a pharmaceutically-acceptable acid or base.

52. (currently amended) A compound of Claim 31, having the configuration shown by formula (I') :

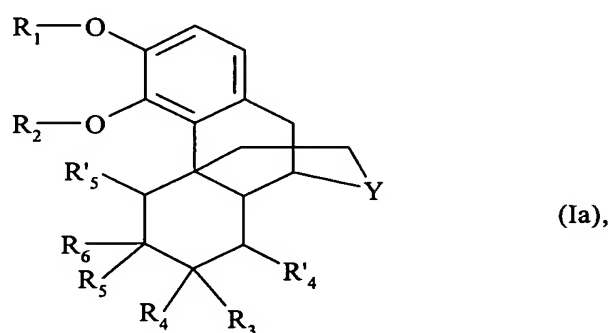


and addition salts thereof with a pharmaceutically-acceptable acid or base.

53. (previously presented) A method for treating a living animal body afflicted with a condition selected from amnesia and deficiencies of memory, comprising the step of administering to the living animal body an amount of a compound of Claim 31 which is effective for treatment of the condition.

54. (previously presented) A pharmaceutical composition, comprising as active principal an effective amount of a compound of Claim 31 together with one or more pharmaceutically-acceptable excipients or vehicles.

55. (previously presented) A method for treating a living animal body afflicted with a condition selected from amnesia and deficiencies of memory associated, comprising the step of administering to the living animal body an amount of a compound selected from those of formula (Ia):



wherein

- R_1 represents alkyl,
- R_2 represents hydrogen, alkylcarbonyl, haloalkylcarbonyl or arylcarbonyl,

- Y represents >NR_7 , $\text{>N}^+\text{O}^-\text{R}_7$ or $\text{>N}^+\text{R}_7\text{R}'_7$ Z^-

wherein R_7 and R'_7 , which may be identical or different, each represent alkyl and Z^- represents a halogen anion,

- R_3 represents hydroxy or alkoxy,
- R_4 and R'_4 each represent hydrogen or together form an additional bond, or R_3 and R_4 together form oxo or $=\text{N-OR}_8$ (wherein R_8 represents hydrogen or alkyl),
- R_6 represents hydroxy, alkylcarbonyloxy (wherein the alkyl moiety may be substituted by hydroxy, alkoxy, carboxy or alkyloxycarbonyl) or alkoxy,

- R_5 and R'_5 each represent hydrogen or together form an additional bond, or R_5 and R_6 together form oxo, $=N-OR_9$ or $=N-NR_{10}R_{11}$ (wherein R_9 , R_{10} , and R_{11} , which may be the same or different, each represent hydrogen or alkyl),

it being understood that:

5 the term "alkyl" denotes an alkyl group having 1 to 6 carbon atoms which may be linear or branched and
 the term "alkoxy" denotes an alkyloxy group having 1 to 6 carbon atoms which may be linear or branched,

10 its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically-acceptable acid or base,

which is effective for treatment of the condition.

56. (previously presented) The method of Claim 55, wherein the compound of formula (Ia) is sinomenine.

15 **57.** (canceled)

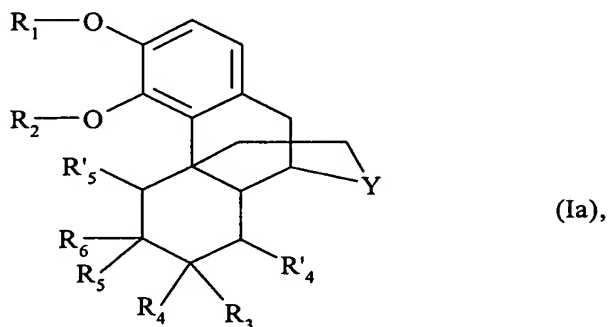
58. (canceled)

59. (previously presented) The method of Claim 55, wherein the compound of formula (Ia) is selected from:

20 (9 α ,13 α)-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-one hydrazone;
 (7 α ,9 α ,13 α)-4-hydroxy-3,7-dimethoxy-17-methylmorphinan-6-one;
 (7 β ,9 α ,13 α)-4-hydroxy-3,7-dimethoxy-17-methylmorphinan-6-one;
 (9 α ,13 α)-3,7-dimethoxy-17-methyl-6-oxo-7,8-didehydromorphinan-4-yl propionate;
 (9 α ,13 α)-3,4,7-trimethoxy-17-methyl-7,8-didehydromorphinan-6-one;
 (9 α ,13 α)-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-one oxime;

(9 α ,13 α)-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-4,6-diol;
 (9 α ,13 α)-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-one N-oxide;
 (9 α ,13 α)-6-amino-3,7-dimethoxy-17-methylmorphinan-4-ol;
 4-[(9 α ,13 α)-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-yl]-oxy}-4-oxobutanoic acid;
 (9 α ,13 α)-3,7-dimethoxy-17-methyl-4-(propionyloxy)-7,8-didehydromorphinan-6-yl propionate;
 (9 α ,13 α)-17-benzyl-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-17-ium-6-one bromide;
 (9 α ,13 α)-17-ethyl-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-17-ium-4,6-diol bromide;
 (9 α ,13 α)-17-ethyl-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-17-ium-6-one bromide;
 (9 α ,13 α)-4-(benzoyloxy)-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-yl benzoate;
 (9 α ,13 α)-4-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-6-yl benzoate;
 and
 (9 α ,13 α)-6-hydroxy-3,7-dimethoxy-17-methyl-7,8-didehydromorphinan-4-yl benzoate.

60. (previously presented) A pharmaceutical composition comprising as active principle an effective amount of a compound selected from those of formula (Ia):



wherein

- R₁ represents alkyl,

- R₂ represents hydrogen, alkylcarbonyl, haloalkylcarbonyl or arylcarbonyl,

- Y represents >NR_7 , $\text{>N}^+\text{O}^-\text{R}_7$ or $\text{>N}^+\text{R}_7\text{R}'_7$ Z⁻

wherein R₇ and R'₇, which may be identical or different, each represent alkyl and Z⁻ represents a halogen anion,

- 5
- R₃ represents hydroxy or alkoxy,
 - R₄ and R'₄ each represent hydrogen or together form an additional bond, or R₃ and R₄ together form oxo or =N-OR₈ (wherein R₈ represents hydrogen or alkyl),
 - R₆ represents hydroxy, alkylcarbonyloxy (wherein the alkyl moiety may be substituted by hydroxy, alkoxy, carboxy or alkyloxycarbonyl) or alkoxy,
- 10
- R₅ and R'₅ each represent hydrogen or together form an additional bond, or R₅ and R₆ together form oxo, =N-OR₉ or =N-NR₁₀R₁₁ (wherein R₉, R₁₀, and R₁₁, which may be the same or different, each represent hydrogen or alkyl),

it being understood that:

- 15
- the term "alkyl" denotes an alkyl group having 1 to 6 carbon atoms which may be linear or branched and
- the term "alkoxy" denotes an alkyloxy group having 1 to 6 carbon atoms which may be linear or branched,

its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically-acceptable acid or base,

20

together with one or more pharmaceutically-acceptable excipients or vehicles.

- 25
61. (previously presented) The method of Claim 53, wherein the living animal body is a human.

62. (previously presented) The method of Claim 55, wherein the living animal body is a human.